

MRS CONSULTANTS, LLC.

Cultural Resource Specialists Archaeologists NHPA Section 106 Consultants

A Phase I Cultural Resources Survey Assessment of the Proposed Crimson Oak Grove Slurry Pond Impoundment No. 7 Project in Concord, Jefferson County, Alabama

**By Erinn E. Townsend
& Marla J. Spry**

**Beth A. Ryba
Principal Investigator**



PERFORMED BY:
MRS Consultants, LLC.
P.O. Box 3146
Tuscaloosa, Alabama 35403


PERFORMED FOR:
McGehee Engineering Corp.
P.O Box 3431
Jasper, Al. 35502

October 29, 2021

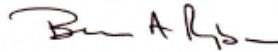
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in Concord, Jefferson County, Alabama**



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Project Information:

Proposed Use: Slurry pond impoundment

Survey Size: 346 acres (140.0 hectares)

Date of Survey: September 27-30, 2021
October 1, 12-15 2021

Locational Data:

County/State: Jefferson County, AL

Topographic Map: Concord, AL

Township: 18S **Range:** 5W

Sections: 16, 17, 20, 21, 28 & 29

Topographic: Floodplains

INTRODUCTION

MRS Consultants, LLC was contracted by McGhee Engineering Corp to perform a cultural resources assessment for a proposed mine of the Crimson Oak Grove Slurry Pond Impoundment No.7 Project near Concord in Jefferson County, Alabama (Figure 1). Cultural Resources Specialist, Linda Hollis and Archaeological Assistant, Erinn E. Townsend conducted the background research for this project to identify any previously recorded cultural resources and to determine the probability of finding cultural resources. A pedestrian survey was conducted within the project corridor to assess the existence of cultural resources, including archaeological sites, historic structures, and cemeteries. Jeffery M. Meyer (Cultural Resource Specialist) and Linda Hollis (Cultural Resource Specialist) performed the field survey on September 27-30, 2021 and October 1, 12-15, 2021. Beth A. Ryba serves as the Principal Investigator.

The Crimson Oak Grove Slurry Pond project encompasses approximately 346 acres (140.0 hectares) proposed for a slurry pond associated with mining operations. Located to the northwest of Concord, the study areas can be viewed in Sections 16, 17, 20, 21, 28 & 29, Township 18S, Range 5W on the USGS 7.5' Concord, Alabama topographic quadrangle map (Figure 2). Elevations within the survey corridor range between approximately 376 ft to 556 ft AMSL. The survey area consists of a relatively level plateau with some ridges and broad drainages covered in immature to mature planted pine. Gas wells and the infrastructure for the gas wells, planted grass green fields, disturbed utility right of way (ROW), access roads, and clearcut areas characterize the setting. The Area of Potential Effect (APE) for indirect effect is restricted to the areas adjacent proposed mine.

Specific data for the survey area are provided throughout the report, including general project data, information pertaining to the background research, and archaeological field data. Recommendations concerning the proposed project conclude the report.



Figure 1. Map Showing Jefferson County.

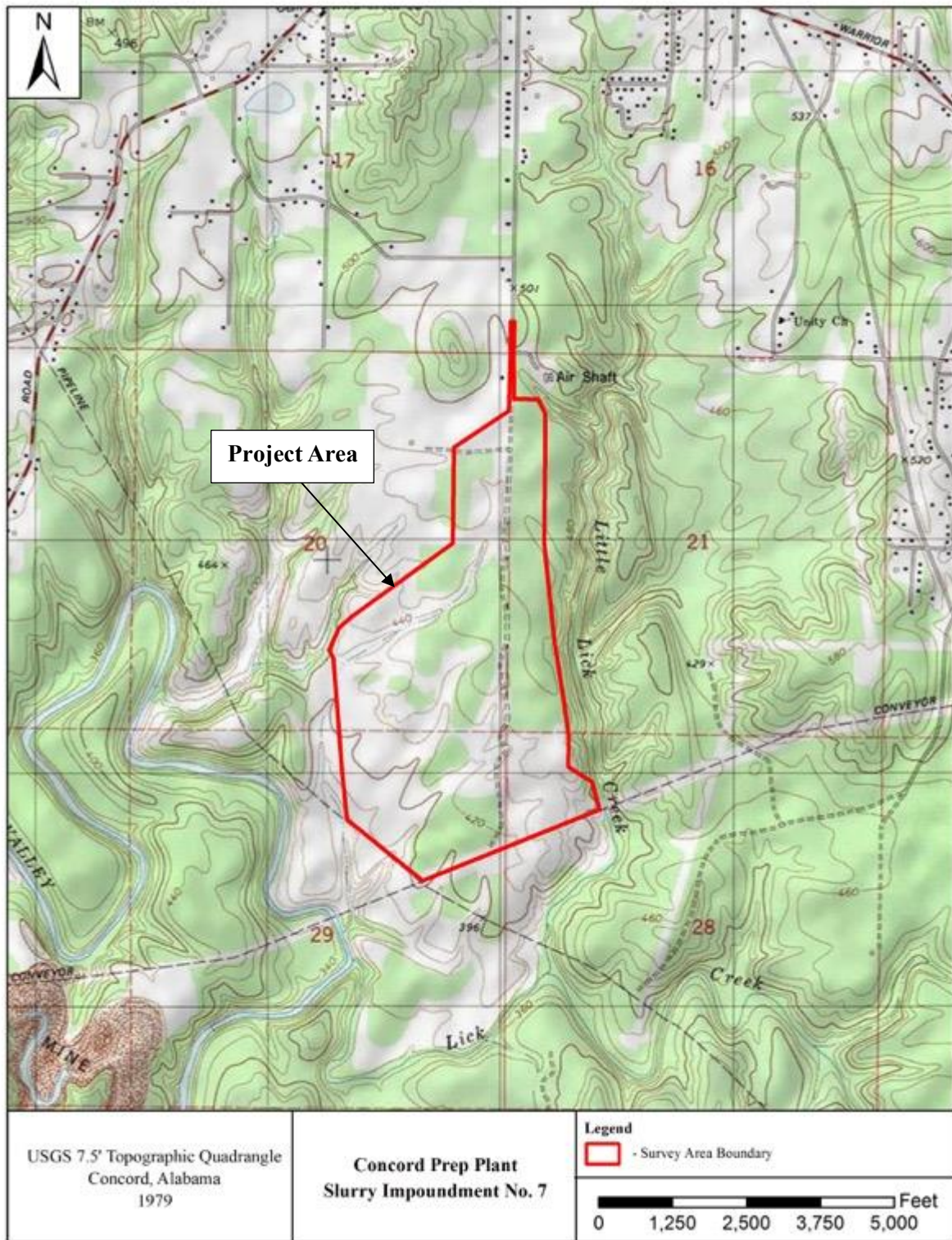


Figure 2. USGS 7.5' Concord, Alabama Topographic Quadrangle Showing the Proposed Slurry Pond Impoundment Survey Area.

BACKGROUND RESEARCH

Background research was conducted before the field investigation to identify any known cultural resources within the study area, especially archaeological sites, cemeteries, historic structures, and historic communities. This research will also serve to identify the potential for such resources. Several sources were referenced during the research, including the *Alabama Online Cultural Resources Database* (AOCRD) and *Phase I Surveys Module* maintained by the University of Alabama Office of Archaeological Research, the *National Register of Historic Places* (NRHP), the *National Historic Landmarks* (NHL), the *Alabama Register of Landmarks and Heritage* (ARLH). Historical maps at the *Historical Map Archive* website by the University of Alabama and *The National Map: Historical Topographic Map Collection* website at the U.S. Geological Service were also referenced. Below is a summary of the background research. Figure 3 provides a map showing the previously recorded cultural resources and previous surveys conducted in the vicinity. A summary of the background research follows.

Alabama Online Cultural Resources Database: The AOCRD Alabama State Site File (ASSF) was referenced for previously recorded archaeological sites. Four sites are recorded in the nearby vicinity of the project areas including sites 1Je463, 1Je464, 1Je465 and 1Je467.

Site 1Je463 was recorded by Chris McLaughlin, Leeds, Alabama. This site is a small lithic scatter located on the top of a ridge over valley creek. No diagnostic artifacts were encountered and no collection was made. Observed: one biface fragment of yellow chert, 1 core residual of gray chert, two secondary flakes of mottled chert.

References on file: "*An Archaeological and Cultural Resources Survey of the Proposed Bessemer, Alabama Water Works System*", By Chris H. McLaughlin, Chris H. McLaughlin, 1995."

Site 1Je464 was recorded by Chris McLaughlin, Leeds, Alabama. This site is a small lithic scatter located on a low ridge overlooking Valley Creek. No diagnostic artifacts were encountered, so no collection was made. Observed: one biface fragment with break, 2 secondary flakes, 2 pressure flakes.

References on file: "*An Archaeological and Cultural Resources Survey of the Proposed Bessemer, Alabama Water Works System*", By Chris H. McLaughlin, Chris H. McLaughlin, 1995."

Site 1Je465 was recorded by Chris McLaughlin, Leeds, Alabama. This site is a small lithic scatter at the crest of a low ridge overlooking Valley Creek. No diagnostic artifacts were encountered and no collection was made. Observed: one core residual of knox chert, one pressure flake of white chert, one secondary flake of red iron stone, and one secondary flake of black/white chert.

References on file: "*An Archaeological and Cultural Resources Survey of the Proposed Bessemer, Alabama Water Works System*", By Chris H. McLaughlin, Chris H. McLaughlin, 1995."

Site 1Je467 was recorded by Chris McLaughlin, Leeds, Alabama. This site was encountered in a deeply entrenched drainage below a beaver dam. Material encountered included one (1) pitted stone, one (1) sandstone abrader, and two (2) small fragments of fire-cracked rock. All of this material was determined to have been redeposited.

References on file: "An Archaeological and Cultural Resources Survey of the Proposed Bessemer, Alabama Water Works System", By Chris H. Mclaughlin, Chris H. Mclaughlin, 1995."

Phase I Surveys: The Phase I Surveys website was referenced for previous archaeological surveys. Three cultural resource surveys (Robblee & etc 1998, Pearce 2006 and Lolley 2010) are documented in the vicinity of the proposed project area. A summary of the previously conducted surveys in the vicinity follows.

In 1998, R. Christopher Goodwin and Associates performed an archaeological survey and inventory of the proposed Southern Natural Gas Company 20 in O.D. Calera Branch line project (Robblee & etc 1998).

In 2001, Panamerican Consultants performed a cultural resources survey of two proposed access roads at the United States Steel Concord Preparation Plant, Jefferson County, Alabama (Queen 2001).

In 2006, Panamerican Consultants performed a cultural resources survey for the proposed Rock Creek cellular-tower project (Pearce 2006).

In 2010, P. E. LaMoreaux and Associates performed an archaeological survey for additions to the proposed Oak Grove Mine, P-3232, Revision R-27 project (Lolley 2010).

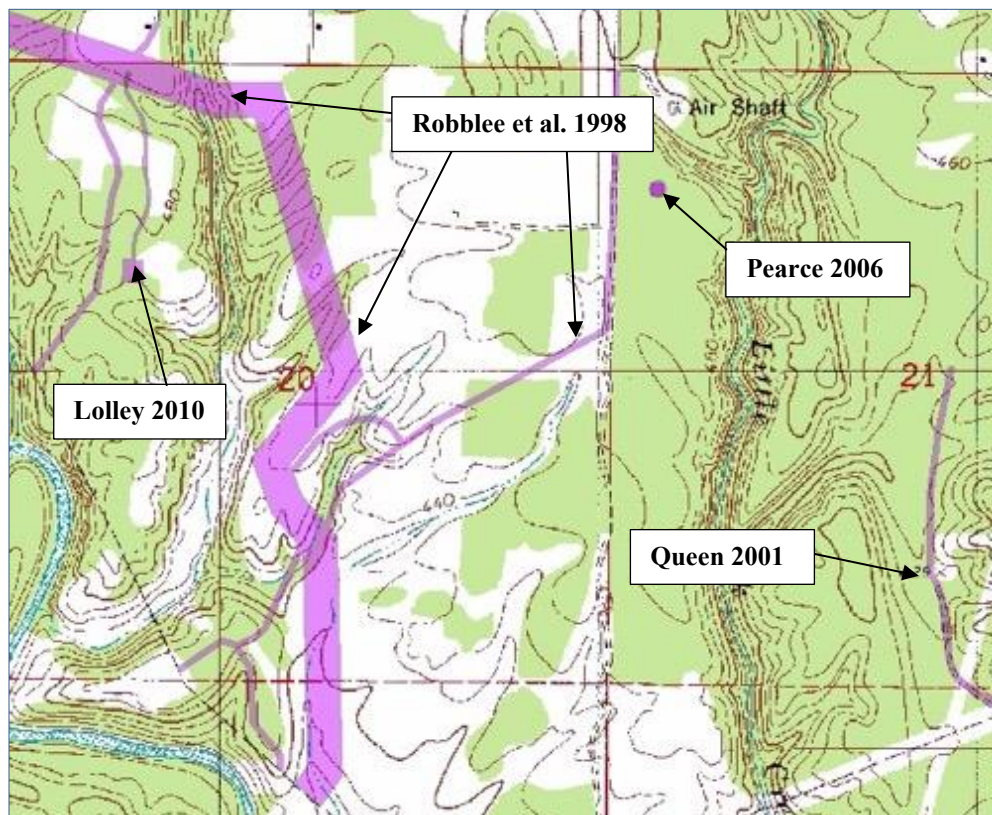


Figure 3. Phase I Surveys Website Map Showing Previous Surveys.

National Register of Historic Places: No NRHP listed properties are located within close proximity to the project area.

Alabama Register of Landmarks and Heritage: No ARLH properties are listed for the general area.

Historical Maps Archives Website: Several mid-late 19th and early 20th century maps were referenced using the *Historical Map Archive* (<http://alabamamaps.ua.edu/>) and *The National Map: Historical Topographic Map Collection* (<https://ngmdb.usgs.gov/topoview/>). These resources are used during the field investigations to determine areas of disturbance as well as to assist in identifying any historic structures or resources. The 1935 Yolande topographic map shown in Figure 4 does not indicate that there are any historic structures in the project area.

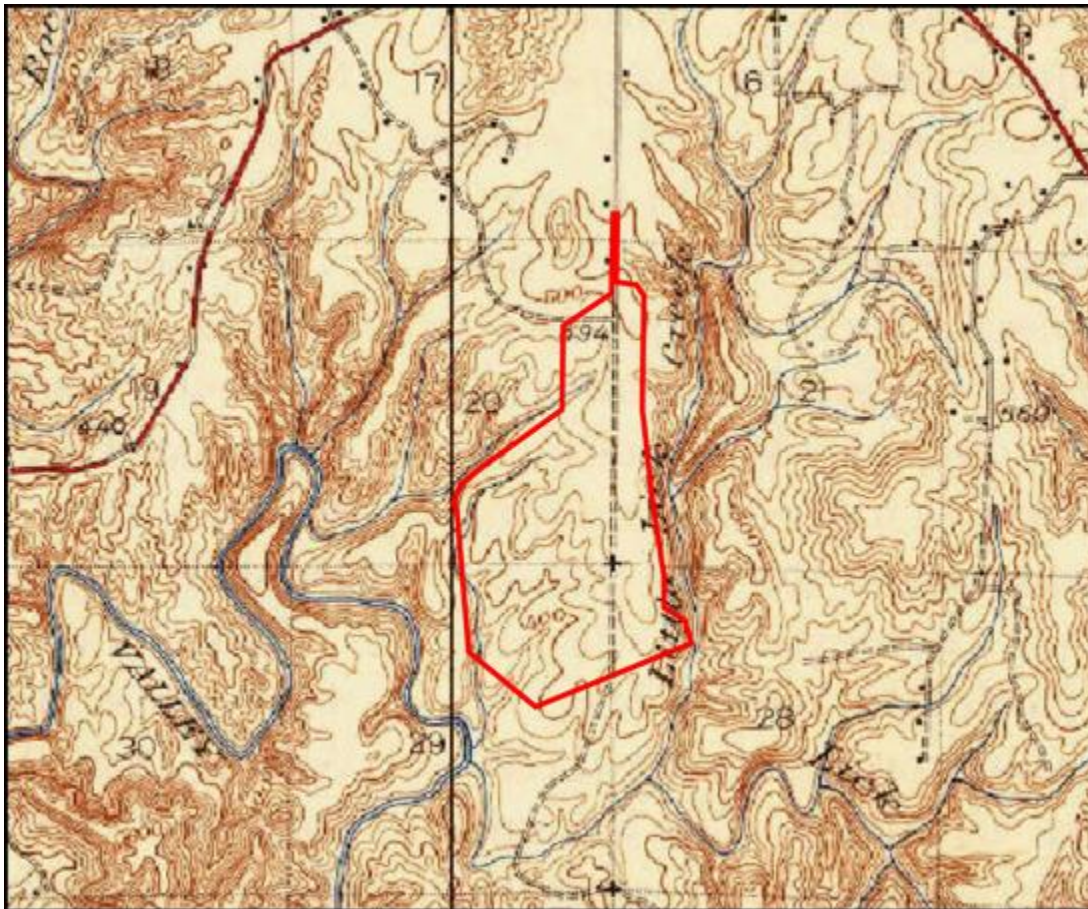


Figure 4. 1935 Yolande Topographic Map Showing the Project Area.

NRCS Soil Data: The NRCS Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov>) was referenced for soils within the survey area (NRCS 2021). Four soil types are present at the survey area and information is provided below in Table 1.

Table 1. Soil Types within the Project Area.

Soil Type	Parent Material	Landform	Typical Profile
9- Montevallo-Nauvoo association, 6 to 45 percent slopes	Loamy residuum weathered from shale and siltstone	Hillslopes	A - 0 to 6 inches: channery silt loam B - 6 to 16 inches: very channery silt loam Cr - 16 to 80 inches: bedrock
30- Nauvoo fine sandy loam, 2 to 8 percent slopes	Loamy residuum weathered from sandstone and shale	Ridges	A - 0 to 7 inches: fine sandy loam BE - 7 to 12 inches: fine sandy loam Bt - 12 to 34 inches: clay loam C - 34 to 46 inches: sandy loam Cr - 46 to 80 inches: bedrock
31- Nauvoo fine sandy loam, 8 to 15 percent slopes	Loamy residuum weathered from sandstone and shale	Hillslopes	A - 0 to 7 inches: fine sandy loam BE - 7 to 12 inches: fine sandy loam Bt - 12 to 34 inches: clay loam C - 34 to 46 inches: sandy loam Cr - 46 to 80 inches: bedrock
40- Townley-Nauvoo complex, 8 to 15 percent slopes	Clayey residuum weathered from sandstone and shale	Ridges	A - 0 to 4 inches: silt loam Bt - 4 to 25 inches: silty clay Cr - 25 to 80 inches: bedrock

FIELD METHODS

The field survey conducted for the proposed slurry pond implemented standard archaeological survey techniques. A pedestrian reconnaissance was conducted using subsurface shovel tests as well as a visual inspection of exposed ground surfaces. The proposed slurry pond impoundment includes 346 acres in an area dominated by gas wells and mining operations. The intensity of the field survey was based on the probability to find significant, intact cultural deposits. Prior to the survey, the project area was evaluated for its potential to contain cultural resources, especially archaeological sites, and traditional sites. Soil classification, slope and topography, and nearby water sources are also factors in determining probability for archaeological site occurrence. Level areas within the study area were considered to have a low to moderate probability for prehistoric and/or historic archaeological sites to exist.

The project area is mostly level except for a few broad drainages and a series of ridge landforms in the southwestern portion of the project. Therefore, the property is assessed as having a low to moderate probability for the occurrence of intact cultural deposits. The survey area is covered in planted

pine forests ranging from thick and overgrown immature pine trees and saplings to thinned mature pine forests. Numerous impacts and disturbances, such as methane gas wells and the infrastructure for the wells, access roads, staging areas, and utility easements are noted throughout the project area.

Any exposed ground surfaces encountered were inspected for cultural materials, aboveground features, notable depressions, etc. Although the survey area is mostly covered in vegetation and surface visibility was generally poor, numerous eroded and exposed areas were available for inspection. Because surface visibility was generally poor, subsurface testing was the primary investigative technique for the 346 acres (140.0 hectares) project area. In addition to the surface investigations, a subjective shovel testing program was conducted in order to identify cultural material as well as ascertain the stratigraphic integrity of the project areas. Shovel test pits (STPs) were excavated in the survey area taking into considering the topography, soil conditions, and previous disturbances. Each STP measured approximately 30 cm to 40 cm in diameter and was excavated into subsoil. Soils were sifted within a 6 mm mesh screen to search for cultural materials.

A total of three hundred and ten (310) STPs were excavated within the survey area (Figure 6). Soil profiles are generally consistent throughout the area and tests revealed approximately 0 cm to 13 cm of dark grayish brown sandy clay loam underlain by reddish yellow sandy clay subsoil to depths exceeding 27+ cm. For each shovel test, the soil types and stratigraphic profile were recorded. Shovel test locations and survey details are shown on Figure 6. No cultural resources were discovered during the field investigations for the proposed undertaking. Photographs were taken during the survey to document the environmental conditions of the property.

As a result of these investigations, no archaeological sites were discovered within the survey area despite intensive shovel testing and surface investigations. The project area is covered in planted pine and has been subject to decades of timber cultivation and disturbances associated with gas exploration in the area. Moreover, numerous gas wells dot the landscape as well as other impacts. There is little to no likelihood for the presence of cultural resources. No archaeological would be affected by the proposed undertaking. Past disturbances associated with timber harvesting activities, land clearing, gas wells and moderate to severe erosion have reduced any probability that intact cultural deposits exist. No cultural materials were discovered during the surface investigations and subsurface testing. No further testing or investigations are recommended.

RESEARCH FINDINGS

No archaeological sites were discovered during the investigation of the proposed slurry pond impoundment area. No evidence of archaeological resources or prior human occupation was found within the project area during the surface investigations and subsurface testing. There is no potential for the occurrence of intact cultural deposits to exist within the project boundary due to moderate to severe erosion and previous disturbances including timber cultivation, gas well construction, and infrastructure development.

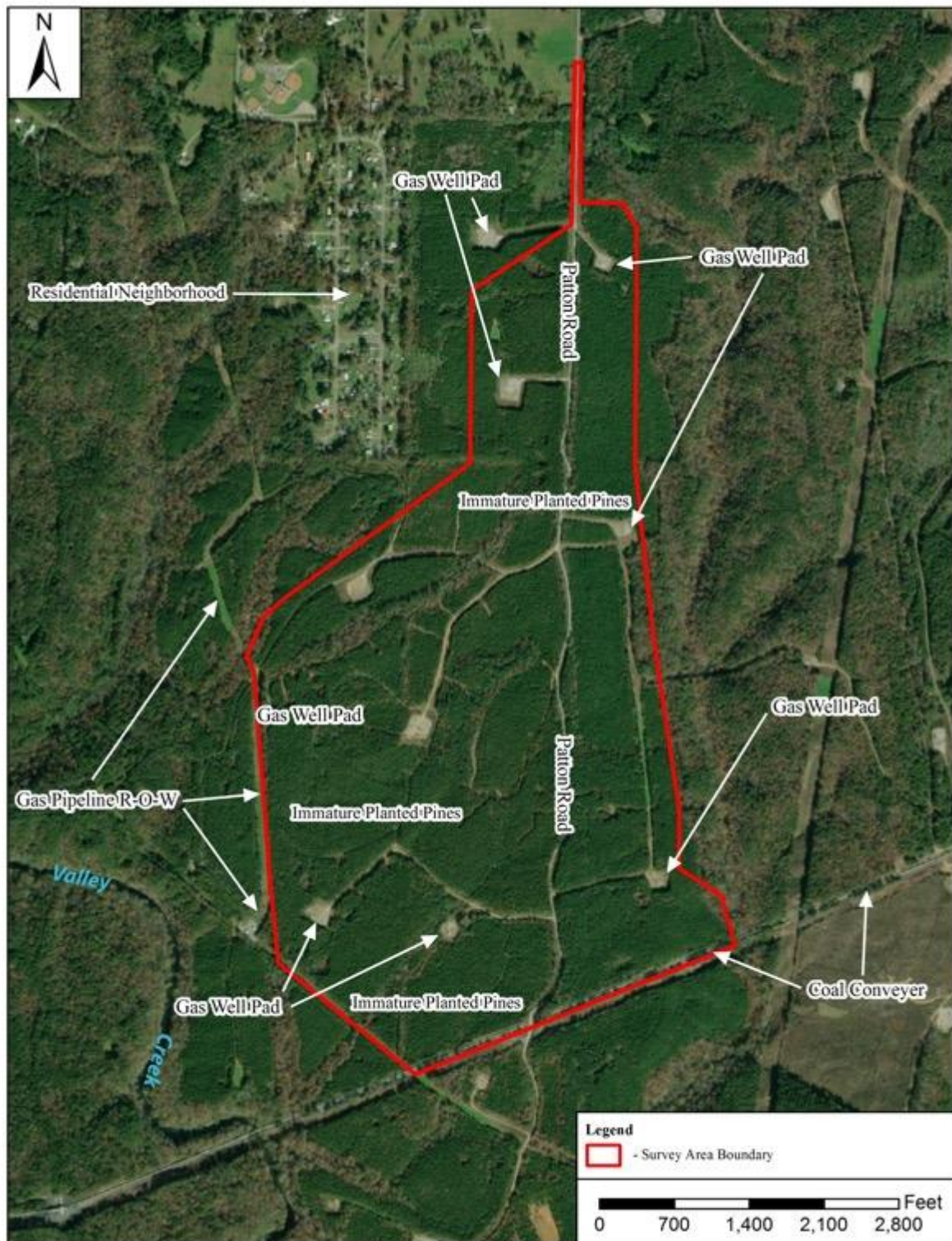


Figure 5. Aerial Image Showing the Project Area and Survey Details of the Area.

The following section summarizes the environmental conditions observed and recorded during the archaeological survey. An additional section details the architectural landscape. Maps and aerial images of the survey area are provided throughout the report and photographs of the survey area are located at the end of the report. The following tabulation summarizes the environmental conditions observed and recorded during the archaeological survey.

Archaeological Data:

Setting/Ground Cover: Level plateau landform/moderate slope finger ridges/immature to mature pine trees/clearcuts/planted green fields/secondary growth

Previous Impacts: Access roads/gas well pads/utility ROW/land clearing/timber cultivation activities/borrow area/moderate to severe erosion

Degree of Surface Visibility: 20 % to 90%

Nearest Water Source: Little Lick Creek

Probability of Archaeological Sites: Low

Soil Types:

- 29- Montevallo-Nauvoo association, 6 to 45 percent slopes
- 30- Nauvoo fine sandy loam, 2 to 8 percent slopes
- 31- Nauvoo fine sandy loam, 8 to 15 percent slopes
- 40- Townley-Nauvoo complex, 8 to 15 percent slopes

Number of Shovel Tests: Three hundred and ten (310)

Number of Archaeological Sites: None

Findings: The survey area includes approximately 346 acres to the east of Little Lick Creek. The proposed slurry pond impoundment area mostly occupies a level plateau landform with a series of finger ridges in the southwestern portion of project. Gentle to moderate slope terrain is mostly covered in immature to mature planted pine. Much of the immature forests consist of thick, juvenile sapling pine trees. Several existing access roads provide access to the survey area. Numerous past disturbances such as gas wells, borrow pit, push piles and timber harvesting activities greatly reduce any likelihood for the occurrence of intact cultural resources. The project area is considered to have a low to moderate probability for the occurrence of cultural resources.



Figure 6. USGS 7.5' Concord, Alabama Topographic Quadrangle Showing the Proposed Slurry Pond Impoundment Area, Shovel Test Locations, and Survey Details.

During the field investigation of the property, three hundred and ten (310) shovel tests were excavated within the survey area boundaries. STPs in the project area revealed a shallow topsoil layer that rarely exceeded 27 cm. Typical soil profiles are consistent throughout the area and tests revealed approximately 0 cm to 13 cm of dark grayish brown sandy clay loam underlain by reddish yellow sandy clay subsoil. The subsurface testing program revealed an eroded setting and severe soil loss. Gas wells, utility infrastructure, timber harvesting practices and subsequent erosion have reduced any likelihood for archaeological sites to exist.

No evidence of archaeological resources or prior human occupation was found within the project area during the surface investigations and subsurface testing. No further testing or investigations are recommended. The survey area was visually inspected for cultural materials, above ground features, notable depressions, etc., none of which were observed. As such, no cultural resources will be affected by the proposed undertaking.

SUMMARY AND RECOMMENDATIONS

MRS Consultants, LLC was contracted by McGhee Engineering Corp to perform a cultural resources assessment for a proposed mine of the Crimson Oak Grove Slurry Pond Impoundment No.7 Project near Concord in Jefferson County, Alabama. A pedestrian survey was conducted within the project area to assess the existence of cultural resources, including archaeological sites, historic structures, and cemeteries. Jeffery M. Meyer (Cultural Resource Specialist) and Linda Hollis (Cultural Resource Specialist) performed the field survey on September 27-30, 2021 and October 1, 12-15, 2021. Beth A. Ryba serves as the Principal Investigator.

The Crimson Oak Grove Slurry Pond project encompasses approximately 346 acres (140.0 hectares) proposed for a slurry pond associated with mining operations. Located to the northwest of Concord, the study areas can be viewed in Sections 16, 17, 20, 21, 28 & 29, Township 18S, Range 5W on the USGS 7.5' Concord, Alabama topographic quadrangle map. Elevations within the survey corridor range between approximately 376 ft to 556 ft AMSL.

The survey area consists of a relatively level plateau with some ridges and broad drainages covered in immature to mature planted pine. Gas wells and the infrastructure for the gas wells, planted grass green fields, disturbed utility right of way (ROW), access roads, and clearcut areas characterize the setting. The Area of Potential Effect (APE) for indirect effect is restricted to the areas adjacent proposed mine.

Archaeological field investigations within the survey area boundaries included surface investigations and subsurface testing. Soil profiles generally revealed eroded and shallow deposits. No cultural materials were identified during the shovel testing or surface investigations. As such, no cultural resources will be affected by the proposed undertaking. The project should have no effect on any historic properties. Based on these findings, MRS Consultants, LLC. recommends that the proposed Slurry Pond No. 7 Project in Jefferson County, Alabama be cleared in regard to cultural resources.

All materials and documentation related to projects conducted by MRS Consultants will be periodically curated at a curational facility that meets Department of Interior 36 CFR Part 79 standards. Curation agreement attached.

REFERENCES CITED

Alabama Historical Commission

- 2021 *Alabama Historic Cemetery Register*. Montgomery, AL.
- 2021 *Alabama Register of Landmarks and Heritage*. Montgomery, AL.

National Park Service

- 2021 *National Register Information System*. <http://www.nr.nps.gov/nrloc1.htm>.
- 2021 *National Historic Landmarks Program*. <http://tps.cr.nps.gov/nhl/>.

Natural Resources Conservation Service (NRCS)

- 2021 *Web Soil Survey*. Electronic document, <http://websoilsurvey.nrcs.usda.gov/app/>

Office of Archaeological Research, University of Alabama Museums

- 2021 *Alabama Online Cultural Resources Database*. Electronic document.
- 2021 *Phase I Surveys*. Electronic document.

University of Alabama

- 2021 *Alabama Maps: Historical Map Archive*. Electronic document, <http://alabamamaps.ua.edu>

U.S. Geological Survey

- 2021 *The National Map: Historical Topographic Map Collection*.



Figure 7. View to South of Existing Access Road in Survey Area.



Figure 8. View to South of Existing Access Road and Utility Line in Survey Area.



Figure 9. View to South of Gas Pipeline in Survey Area.



Figure 10. View to East of Existing Gas Well Pad.



Figure 11. View to South of a Gas Well Pad with Immature to Mature Pine Trees and Mixed Hardwoods in Background.



Figure 12. East View of Push Piles with Immature to Mature Pine Trees and Mixed Hardwoods.



Figure 13. View to South of a Disturbance Due to Construction of Conveyor.



Figure 14. View to East of Planted Pine Forest.



Figure 15. View to West of Planted Pine.



Figure 16. View to North of Immature Pine Forest.



Figure 17. View to Northeast of Push Pile in Pine Forest.



Figure 18. View to West of the Access Road with Erosion Next to Road.



Figure 19. View to South of a Clear-Cut Field with Pine Trees and Hardwoods in Treeline.



Figure 20. View to Southwest of a Flood Scoured, Drainage area within Survey Area.



Figure 21. View to Southeast of a Cultivated Green Field within Survey Area.



Figure 22. View to South of a Cultivated Green Field with Immature to Mature Pine Trees.



Figure 23. View to Northeast of Old Borrow Pit in Survey Area.



Figure 24. View to East of Pipeline in Project Area.

TROY UNIVERSITY



**Archaeological
Research Center**

Date: October 04, 2021

Marla Spry
MRS Consultants, LLC
P.O. Box 3146
Tuscaloosa, Alabama 35403

Dear Marla,

This letter is to confirm our standing agreement to provide curation services to MRS Consultants, LLC on an as-needed basis.

Please be advised that once a year we must be notified of all reports in which we were named as the repository. Project collections must be submitted within one calendar year of completion. Small projects may be complied for periodic submission. The AHC survey policy specifies which materials must be curated (Administrative Code of Alabama, Chapter 460-X-9). Renewal of this agreement is contingent upon compliance.

We appreciate this opportunity to be of assistance and look forward to working with you in the future.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stephen B. Carmody'.

Stephen B. Carmody
Director
Archaeological Research Center
Troy University